

2217-949

8/2/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

James L. Kunstman, Ph.D.  
PBI/Gordon Corporation  
1217 12<sup>th</sup> Street  
P.O. Box 014090  
Kansas City, MO 64101

AUG 02 2013

Subject: Label Notification per PRN 98-10  
Product Name: EH-1491 Herbicide  
EPA Registration Number: 2217-949  
Application Dated: February 8, 2013

Dear Dr. Kunstman,

The Agency is in receipt of your application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for EH-1491 Herbicide (EPA Reg. No. 2217-949) dated February 8, 2013. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

Please note that marketing claims made on the pesticide label must be substantiated by data maintained in your files. If data supporting the marketing claims made on the product label is not available, then those claims must be removed.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA §12(a)(1)(E). 40CFR §156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, please contact Emily Hartman via email at [hartman.emily@epa.gov](mailto:hartman.emily@epa.gov) or by phone at (703) 347-0189.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathryn V. Montague".

Kathryn V. Montague, Product Manager 23  
Herbicide Division  
Registration Division  
Office of Pesticide Programs

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United States  
Environmental Protection Agency  
Washington, DC 20460

- Registration
- Amendment
- Other

OPP Identifier Number

### Application for Pesticide - Section I

|   |   |  |
|---|---|--|
| 1. Company/Product Number<br><b>2217-949</b>  | 2. EPA Product Manager<br><b>Kathryn V. Montague</b>  | 3. Proposed Classification   |
| 4. Company/Product (Name)<br><b>EH-1491 Herbicide</b>   | PM#<br>Product Manager—Team 23  | <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted |
| 5. Name and Address of Applicant (Include ZIP Code)<br>PBI/Gordon Corporation<br>Post Office Box 014090<br>Kansas City, Missouri 64101<br><input type="checkbox"/> Check if this is a new address | 6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:<br>EPA Reg. No. _____<br>Product Name _____ |  |

**NOTIFICATION**

**AUG 07 2013**

### Section - II

|  |  |
|--|--|
| <input type="checkbox"/> Amendment - Explain below.                            | <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ |
| <input type="checkbox"/> Resubmission in response to Agency letter dated _____ | <input type="checkbox"/> "Me Too" Application.   |
| <input checked="" type="checkbox"/> Notification - Explain below.              | <input type="checkbox"/> Other - Explain below.  |

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

### Notification per Pesticide Registration Notice (PRN) 98-10: Section IV(C)

We ask to add a statement to comply with California Prop 65. Please refer to page 14 of the enclosed draft label.

e-mail to [jkunstman@pbigordon.com](mailto:jkunstman@pbigordon.com) FAX: 816-421-2731

### Section - III

|   |  |   |  |  |   |  |                                |
|---|--|---|--|--|---|--|--------------------------------|
| 1. Material This Product Will Be Packaged In:   |  |   |  | 2. Type of Container   |   |  |                                |
| Child-Resistant Packaging<br><input type="checkbox"/> Yes*<br><input checked="" type="checkbox"/> No                    | Unit Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No | Water Soluble Packaging<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No |  | <input type="checkbox"/> Metal   | <input checked="" type="checkbox"/> Plastic | <input type="checkbox"/> Glass   | <input type="checkbox"/> Paper |
| * Certification must be submitted   |  |   |  | If "Yes" Unit Packaging wgt.   | No. per container                           | If "Yes" Package wgt.  | No. per Container              |
| 3. Location of Net Contents Information<br><input checked="" type="checkbox"/> Label <input type="checkbox"/> Container |  |   |  | 4. Size(s) Retail Container<br>1 and 2.5 Gallons   |   | 5. Location of Label Directions<br><input checked="" type="checkbox"/> On Label<br><input type="checkbox"/> On Labeling accompanying product |                                |
| 6. Manner in Which Label is Affixed to Product  |  |   |  | <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Other _____<br><input checked="" type="checkbox"/> Paper glued<br><input type="checkbox"/> Stenciled |   |  |                                |

### Section - IV

|   |  |  |
|---|--|--|
| 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)   |  |  |
| Name<br><b>James L. Kunstman, Ph.D.</b>   | Title<br><b>Director of Regulatory Services</b>    | Telephone No. (Include Area Code)<br><b>816-460-5292</b> |
| <p align="center"><b>Certification</b></p> <p><i>I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.</i></p> |  | 6. Date Application Received (Stamped)                   |
| 2. Signature<br>  | 3. Title<br><b>Director of Regulatory Services</b> |  |
| 4. Typed Name<br><b>James L. Kunstman, Ph.D.</b>  | 5. Date<br><b>February 8, 2013</b>                 |  |



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# EH-1491 HERBICIDE

NOTIFICATION

AUG 02 2013

## EPA Reg. No. 2217-949

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

### ACTIVE INGREDIENT:

|                                     |               |
|-------------------------------------|---------------|
| Triclopyr, triethylamine salt ..... | 7.28%         |
| 2,4-D, diethanolamine salt .....    | 30.84%        |
| Dicamba, dimethylamine salt .....   | 2.48%         |
| OTHER INGREDIENTS: .....            | <u>59.40%</u> |
| TOTAL .....                         | 100.00%       |

### THIS PRODUCT CONTAINS:

- 0.50 lb 3,5,6-trichloro-2-pyridinyloxyacetic acid per gallon or 5.22%.
  - 2.00 lb 2,4-dichlorophenoxyacetic acid equivalent per gallon or 20.90%.
  - 0.20 lb 3,6-dichloro-o-anisic acid equivalent per gallon or 2.06%.
- Isomer specific by AOAC Methods.

## KEEP OUT OF REACH OF CHILDREN

## WARNING - AVISO

Si Usted no entiende la etiqueta, busque a alguien para que se la explique a Usted en detalle. (If you do not understand the label, find some one to explain it to you in detail.)

**STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.**

[Table of Contents]

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

**WARNING:** Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Avoid contact with skin.

### Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are natural rubber. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators and other handlers must wear:

- protective eyewear,
- long-sleeved shirt and long pants,
- shoes and socks,
- chemical-resistant gloves (except for applicators using ground boom equipment) and



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- chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

### Engineering Control Statements

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

### User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

| User Safety Recommendations |   |
|-----------------------------|---|
| •                           | Users should wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.   |
| •                           | Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. |
| •                           | Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.       |

| First Aid  |  |
|--|--|
| <b>If in eyes:</b>   | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>   |
| <b>If swallowed:</b>   | <ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul> |
| <b>If on skin or on clothing:</b>  | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| <b>If inhaled:</b>   | <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical information. |  |

### Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

These chemicals (triclopyr, 2,4-D and dicamba) have properties and characteristics associated with chemicals detected in groundwater. The use of these chemicals in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

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## **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170.

This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is :

- coveralls,
- chemical-resistant gloves made of any water-proof material,
- shoes plus socks and
- protective eyewear.

### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

**Reentry Statement:** Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

## **1. Product Description**

EH-1491 is a post emergent herbicide that enters plants through their leaves, woody stems, and cut surfaces. Once in the plant the product moves throughout the plant's vascular system. Visual symptoms such as wilting and yellowing appear in 1 to 3 weeks depending on environmental conditions and plant species. It is effective in controlling broadleaf weeds, woody plants, vines, and brush in pasture and rangeland including established grass pastures, rangeland, and perennial grasslands; Conservation Reserve Program (CRP) acres, non-crop land areas including fencerows, hedgerows, roadside ditches, rights-of-way, farmsteads, and other non-crop areas, and residential lawns, yards, and turfgrass.

## **2. For Best Results**

- Within the rate ranges specified on this label, the lower rates can be used for young, actively growing sensitive weed species. The higher rates can be used for less sensitive species, perennials, and conditions where control is difficult (dense weed stands, larger weeds, stress conditions such as drought or extreme temperatures)

- Spring and fall treatments are preferred to summer treatments.
- Foliar applications should be applied during warm weather when plants are actively growing. Do not apply this product when temperatures are above 85°F as some injury to desirable grasses or turf may be expected.
- Application under low moisture or dry soil conditions may reduce herbicide effectiveness. Wet foliage at the time of application may decrease control.
- Applications of EH-1491 are rainfast within 6 hours after application. For best results avoid watering or irrigation for 24 hours after application.
- Extreme growing conditions such as drought or cold temperatures prior to, at the time of, or following an application may reduce or delay control.
- Do not reseed pastures [or lawns] until at least three weeks after treatment.
- Do not use on newly seeded grasses until grass has established a good root system and is tillering.
- Direct spray on target plants and minimize loss of product through spray drift.

### 3. Precautions

- Do not enter or allow people (or pets) to enter the treated area until sprays have dried.
- This product will kill or injure all broadleaf and woody plants contacted. Do not directly spray areas containing desirable broadleaf plant species including legumes (such as clover or alfalfa), unless injury or loss of the plants can be tolerated. Do not allow EH-1491 to come into direct contact with cotton, grapes, tobacco, vegetable crops, citrus, flowers, fruit or ornamental trees, or other desirable broadleaf plants.
- If a second application is needed, allow 30 days between applications before retreating.
- For ground application only. Aerial applications are not permitted. Do not apply this product through any type of irrigation system.
- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (non-cropland sites adjacent to the edges of a body of water) of lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to wetlands (swamps, bogs, potholes, or marshes). Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals. Do not apply to agricultural drainage water or on agricultural ditchbanks.

### 4. Spray Preparation

**Mixing with Water:** Add one-half the required amount of water to the spray tank, then add EH-1491 Herbicide slowly with agitation, and complete filling the tank with water. Mix thoroughly and continue agitation while spraying. When this product is left standing for extended periods of time (4 to 5 hours), re-agitate to assure uniformity of the spray mixture.

**Mixing with Liquid Fertilizer for Broadleaf Weed Control and Fertilization:** EH-1491 may be tank mixed with Gordon's Liquid Lawn & Pasture Fertilizer 20-0-0 or Gordon's Triple 10 Liquid Fertilizer for weed control and fertilization of pastures and turfgrass. Using liquid fertilizers in applications to woody plants is not recommended as efficacy may be reduced. Mix and apply liquid fertilizers at rates recommended on the Gordon's product labels.

### 5. Application Rates for Treatment in Pastures, Rangeland, and Non-Cropland

**Pastures and rangelands** are defined as established grass pastures, rangeland, and perennial grasslands including the Conservation Reserve Program (CRP). Pastures established with these grasses may be treated: bahiagrass, bermudagrass, bluegrass, brome, reed canarygrass, fescue, orchardgrass, ryegrass, timothy, and wheatgrass.

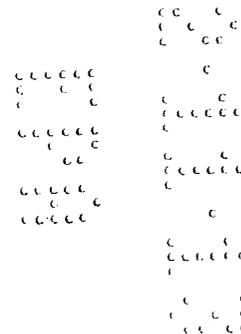
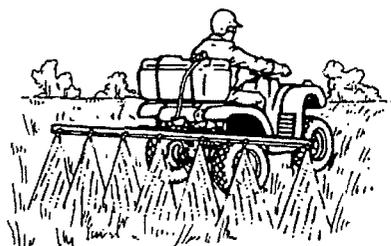
**Non-croplands** are defined as fencerows, hedgerows, roadside ditches, non-irrigation ditchbanks, rights-of-way, farmsteads, and other non-crop areas.

**Table 1. Weeds Controlled:** This product will control or suppress many broadleaf weeds (annual, biennial and perennial) including the weeds listed below.

| <b>Annuals</b>  |   |   |  |
|---|---|---|--|
| catchweed<br>cocklebur, common<br>croton<br>daisy, English<br>eastern black nightshade<br>Florida pusley<br>fleabane, annual<br>jimsonweed *<br>knotweed                                    | kochia*<br>lettuce, wild<br>lambsquarters, common<br>mallow, common<br>marestail (horseweed)<br>Mexican prickly poppy<br>morningglory*<br>mustard, wild, tansy and yellow | nightshade<br>pennycress, field<br>pepperweed, Virginia<br>pigweed, redroot, rough smooth, spiny<br>puncturevine*<br>ragweed, common and giant<br>shepherdspurse          | smartweed, Pennsylvania<br>sneezeweed, bitter<br>sowthistle, annual<br>spiny amaranth<br>sunflower, common<br>velvetleaf*<br>waterhemp<br>wild carrot*                   |
| <b>Biennials</b>  |   |   |  |
| burdock, common<br>cockle, white<br>evening primrose<br>Henbit*   | Mullen, common*<br>plantain, bracted<br>poison hemlock  | ragwort, tansy<br>spotted knapweed<br>starthistle, yellow   | sweetclover<br>thistle, bull, milk, musk, plumeless and Scotch   |
| <b>Perennials</b>   |   |   |  |
| absinth wormwood<br>bindweed, field and hedge<br>buttercup, tall*<br>bracken fern*<br>chickweed<br>chicory<br>clover, white<br>dandelion<br>dock, curly and broadleaf<br>dogfennel          | firewood<br>hemp<br>hoary alyssum*<br>horsenettle*<br>horsetail<br>goatweed<br>goldenrod<br>ground ivy (creeping Charlie)*<br>ironweed                                    | knapweed<br>leafy spurge<br>lespedeza, sericea*<br>lespedeza, common<br>milkweed, common<br>plantain, buckhorn<br>poison ivy*<br>poison oak*<br>poison sumac*<br>pokeweed | ragweed, western<br>smartweed, swamp<br>Sowthistle<br>Stinging nettle<br>thistle, Canada<br>vetch<br>vervain, blue<br>white snakeroot<br>wild violets*<br>yarrow, common |
| * Use the spot treatment application method at high rates for improved performance when controlling or suppressing these weeds. May require more than one application for complete control. |   |   |  |

### 5.1 Broadcast Application Rates for Weed Control

The broadcast application rate is 2 to 4 pints per acre (0.75 to 1.5 fl.oz. per 1000 sq.ft.). See Tables 2 and 3 for typical spray mix rate and how to select application rates. Spray equipment options include tow-behind or all terrain vehicle (ATV) sprayers with spray boom or spray bar. To calibrate your application equipment contact your sprayer manufacturer or consult your equipment owner's manual for speed and pressure settings required to deliver the spray solution at a target volume of 1 gallon per 1,000 sq.ft. (or 43 gallons per acre). See Section 5.4 for application restrictions.



| Application Rate | Area to Spray and Dilution Rate                            |   |   |                            |
|------------------|--|---|---|----------------------------|
|                  | Rate per gallon  | Rate per 15 gallons   | Rate per 25 gallons   | Rate per acre              |
|                  | Coverage area per gallon of mixed solution is 1,000 sq.ft. | Coverage area per 15 gallons of mixed solution is 15,000 sq.ft. | Coverage area per 25 gallons of mixed solution is 25,000 sq.ft. | 1 acre = 43,560 sq.ft.     |
| <b>Low Rate</b>  | 0.75 fl.oz. per 1 gal of water                             | 11.25 fl.oz. per 15 gal of water                                | 18.75 fl.oz. per 25 gal of water                                | 2.0 pt per 43 gal of water |
| <b>Mid Rate</b>  | 1.25 fl.oz. per 1 gal of water                             | 18.75 fl.oz. per 15 gal of water                                | 31.25 fl.oz. per 25 gal of water                                | 3.4 pt per 43 gal of water |
| <b>High Rate</b> | 1.50 fl.oz. per 1 gal of water                             | 22.50 fl.oz. per 15 gal of water                                | 37.50 fl.oz. per 25 gal of water                                | 4.0 pt per 43 gal of water |

Calibrate sprayer to apply 1 gallon of spray solution per 1,000 sq.ft. (or 43 gallons of spray solution per acre). Contact your sprayer manufacturer or consult your equipment owner's manual for speed and pressure settings required to deliver target spray volume. (Alternate spray volumes of 20 to 100 gal per acre are also acceptable. Modify above dilution rates as needed to accommodate the alternate spray volume.)

| Application Rate | Considerations  |
|------------------|---|
| <b>Low Rate</b>  | <b>Annuals:</b> Treat when plants are small (3 to 4 inches tall) actively growing.<br><b>and/or</b><br><b>Biennials:</b> Apply when in the seedling to rosette stage and before the development of flower stalks.<br><b>and/or</b><br><b>Growing Conditions:</b> Young, actively growing, sensitive weed species  |
| <b>Mid Rate</b>  | <b>Perennials:</b> Use for dense vegetation, weeds beyond the appropriate growth stages, difficult to control (resistant) weed species.<br><b>and/or</b><br><b>Growing Conditions:</b> Stress conditions such as drought and/or high temperatures   |
| <b>High Rate</b> | <b>Difficult to control weeds:</b> Apply to perennial weeds in bud to bloom stage with active growth. (Depending on plant growth stage and environmental conditions at the time of application regrowth may occur on hard-to-control species such as field bindweed, chicory, dogfennel, goldenrod, horsetnettle, milkweed, perennial sowthistle, leafy spurge, ground ivy (creeping Charlie), wild violets and Canada thistle. Biennial and perennial weeds may require a follow-up or spot treatment.)<br><b>and/or</b><br><b>Woody plants:</b> The most favorable period for treatment is after the plants have fully leafed in the spring and continues into early summer, depending on temperature, soil moisture and other conditions.<br><b>and/or</b><br><b>Growing Conditions:</b> Extreme stress conditions such as drought and/or extreme temperatures |

### 5.2 Spot Treatment Application Rates for Weed Control

The spot treatment application rate is 1 to 2.5 fl.oz. per gallon of water. Spray until leaves are thoroughly wet but not dripping. See Table 4 for how to choose application rates. Adjust sprayer nozzle to a coarse spray (low pressure, big droplet). Spray equipment options include all terrain vehicle (ATV) sprayers fitted with a spray wand or spray gun, backpack sprayers, and hand-operated or hand-held sprayers.

Depending on plant growth stage and environmental conditions at the time of application regrowth may occur on hard-to-control species such as field bindweed, chicory, dogfennel, goldenrod, horsetnettle, kudzu, milkweed, perennial sowthistle, leafy spurge, and Canada thistle. Biennial and perennial weeds may require a follow-up treatment. See Section 5.4 for application restrictions.



| Amount of product per 1 gallon of water | Growing Conditions, Plant Stage  |
|---|--|
| 1.0 fl.oz.                              | Young, actively growing, sensitive weed species  |
| 1.5 fl.oz.                              | Dense weed stands, larger weeds  |
| 2.0 fl.oz.                              | Stress conditions such as drought or high temperatures                                 |
| 2.5 fl.oz.                              | Mature, dense weeds. Extreme stress conditions such as drought or extreme temperatures |

### 5.3 Spot Treatment Application Rates for Control of Brush, Woody Plants and Vines

The spot treatment application rate is 1 to 2.5 fl.oz. per gallon of water. Spray brush, woody plants, and vines until foliage and green stems are thoroughly wet but not dripping. See Tables 5 and 6 for how to choose application rates and species controlled. Adjust sprayer nozzle to a coarse spray (low pressure, big droplet). Spray equipment options include all terrain vehicle (ATV) sprayers fitted with a spray wand or spray gun, backpack sprayers, and hand-operated or hand-held sprayers.

Spot treatments of brush, woody plants and vines should occur when plants are actively growing, in the full leaf stage in the spring to early summer and growing under favorable environmental conditions. (Depending on plant growth stage and environmental conditions at the time of application regrowth may occur on hard-to-control species requiring a follow-up treatment.) Delay mowing or clipping 2 days before or until 2 days after the application of this product. See Section 5.4 for application restrictions.



| Amount of product per 1 gallon of water | When to Use, Growing Conditions, Plant Stage                           |
|---|--|
| 1.0 fl.oz.                              | Young, actively growing, easy to control species                       |
| 1.5 fl.oz.                              | Mid size, actively growing, easy to control species                    |
| 2.0 fl.oz.                              | Large plants or stress conditions such as drought or high temperatures |
| 2.5 fl.oz.                              | Large, dense plant populations or hard to control species              |

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**Table 6. Brush, Woody Plants and Vines Controlled:** This product will control or suppress many brush, woody plant and vine species including the ones listed below.

| Species Controlled: |                |                         |                         |
|---------------------|----------------|-------------------------|-------------------------|
| alder               | Ceanothus spp. | maples                  | sycamore                |
| ash                 | cottonwood     | poison ivy              | tamarack                |
| beech               | dogwood        | poison oak              | wax myrtle <sup>1</sup> |
| birch               | elderberry     | sassafras <sup>1</sup>  | wild grape              |
| black locust        | hawthorn       | scotch broom            | wild plum               |
| boneset             | hemlock        | sumac (including poison | wild roses              |
| casacara            | honeysuckle    | sumac)                  | willow                  |

<sup>1</sup>Top growth control only

**5.4 Restrictions for Applications to Pasture and Rangelands**

**Pastures and rangelands** are defined as established grass pastures, rangeland, and perennial grasslands including the Conservation Reserve Program (CRP). Pastures established with these grasses may be treated: bahiagrass, bermudagrass, bluegrass, brome, reed canarygrass, fescue, orchardgrass, ryegrass, timothy, and wheatgrass.

**Maximum Application Rates:** Do not apply more than 4 pints of product per acre per application [1.0 lb 2,4-D acid equivalent, 0.25 lb triclopyr acid equivalent and 0.10 lb dicamba acid equivalent per acre per application]. Use one broadcast application per year (season). The maximum seasonal rate is 4 pints of product per acre per season [1.0 lb 2,4-D acid equivalent, 0.25 lb triclopyr acid equivalent and 0.10 lb dicamba acid equivalent per acre per year].

**Grazing and Slaughter Restrictions:** Do not allow lactating dairy animals to graze treated areas until the next growing season following application of this product. Withdraw livestock from grazing treated grass or consumption of treated hay at least 3 days before slaughter. Except for lactating dairy animals and the slaughter restriction, there are no grazing restrictions for animals (including horses, cows, goats, and sheep).

**Haying Restrictions:** Do not cut hay for harvest within 14 days following application.

**Prohibitions:** Postemergent treatments of this product may injure or kill legumes including alfalfa, clovers, lespedezas, sweet clover, trefoils and vetches. Do not spray grass/legume mixtures unless injury or plant loss can be accepted [tolerated]. Do not use this product on newly seeded grasses including, but not limited to buffalograss, kleingrass, sideoats grama, and switchgrass. Do not use this product on forage sorghum, sudangrass, corn, and cereal grains (wheat). Do not reseed treated areas for three weeks after treatment.

**5.5 Restrictions for Applications to Non-Croplands**

**Non-croplands** are defined as fencerows, hedgerows, roadside ditches, non-irrigation ditchbanks, rights-of-way, farmsteads, and other non-crop areas.

**Maximum Application Rates:** Do not apply more than 4 pints of product per acre per application [1.0 lb 2,4-D acid equivalent, 0.25 lb triclopyr acid equivalent and 0.10 lb dicamba acid equivalent per acre per application]. The maximum number of broadcast applications per year is two per year with a minimum interval between applications of 30 days. Application to woody plants is limited to 1 application per year. The maximum seasonal rate is 8 pints of product per acre per season [2.0 lb 2,4-D acid equivalent, 0.50 lb triclopyr acid equivalent and 0.20 lb dicamba acid equivalent per acre per year].

**Prohibitions:** Postemergent treatments of this product may injure or kill legumes including alfalfa, clovers, lespedezas, sweet clover, trefoils and vetches. Do not spray grass/legume mixtures unless injury or plant loss can be accepted [tolerated]. Do not use this product on newly seeded grasses including, but

not limited to buffalograss, kleingrass, sideoats grama, and switchgrass. Applications to noncropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. Do not reseed treated areas for three weeks after treatment.

**6. Lawns, Yards, and Residential Turfgrass (including lawns around farm buildings)**

EH 1491 Herbicide may be applied to cool season turfgrass (Kentucky bluegrass, annual bluegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of these species) and dormant warm season turfgrass (dormant hybrid Bermudagrass, dormant common Bermudagrass, dormant zoysiagrass and dormant bahiagrass) for broadleaf weed control. Do not apply this product to St. Augustine grass (including Floratam) bentgrass or newly seeded grass.

Delay application of this product to grass seedlings until after the second or third mowing. Treated areas may be reseeded 3 weeks after application. If dry conditions exist, a scheduled irrigation or watering 24 hours before and 24 hours after application is recommended. Delay mowing 2 days before and until 2 days after the application of this product. Fall applications provide improved control for emerged winter annuals and perennials such as henbit, chickweed, clover and ground ivy (creeping Charlie). Spot treatments during the summer may be appropriate for sparse infestations or as a follow-up treatment.

**Turfgrass tolerance:** Tolerant turf species listed on this label may exhibit temporary turf injury. The best tolerance occurs under optimal conditions for the turfgrass. Adverse environmental conditions may reduce the selectivity on the turfgrass. Injury may occur under marginal conditions (e.g. low temperatures and drought stress) or under extreme conditions (e.g. high temperatures and high humidity). To avoid turf injury use only on turfgrass that is reasonably free of stress, including diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, improper mowing or improper applications of fertilizer and pesticides. Do not broadcast apply this product when temperatures are above 85°F; some injury can also be expected with spot treatments when air temperatures exceed 85°F.

**Table 7. Broadleaf Weeds Controlled:** This product will control or suppress the following broadleaf weeds.

|                                    |   |   |   |
|------------------------------------|---|---|---|
| Aster, white heath & white prairie | Dock  | Lespedeza, common                                 | Red sorrel (*sheep sorrel)  |
| Bedstraw                           | Dogfennel   | Mallow, common                                    | Shepherdspurse  |
| Beggarweed, creeping               | False dandelion (*spotted catsear & common catsear) | Matchweed   | Speedwell (Veronica)  |
| Bindweed                           |   | Mouseear chickweed                                | Spurge**  |
| Black medic                        | Field bindweed                                      | Mustard   | Thistle   |
| Broadleaf plantain                 | (*morningglory & creeping jenny)                    | Nettle  | White clover (*Dutch clover, honeysuckle clover, white trefoil, & purplewort) |
| Buckhorn plantain                  | Field oxeye-daisy                                   | Old world diamond flower                          |   |
| Bull thistle                       | (*creeping oxeye)                                   | Oxalis (*yellow woodsorrel & creeping woodsorrel) | Wild carrot**   |
| Burdock, common                    | Filaree, whitestem & redstem                        | Parsley-piert                                     | Wild garlic   |
| Buttercup, creeping**              |   | Pennsylvania smartweed                            | Wild geranium   |
| Carpeweed                          | Ground ivy (creeping Charlie)**                     | Pepperweed  | Wild lettuce  |
| Catnip                             | Groundsel   | Pigweed   | Wild mustard  |
| Chickweed                          | Hawkweed  | Pineappleweed                                     | Wild onion  |
| Chicory                            | Healall   | Plantain  | Wild strawberry**   |
| Cinquefoil                         | Henbit**  | Poison ivy  | Wild violets**  |
| Clover                             | Knotweed  | Poison oak  | Yarrow  |
| Curly dock                         | Lambsquarters                                       | Puncturevine**                                    | Yellow rockrose   |
| Dandelion                          | Lawn burweed  | Purple cudweed                                    |   |
| Dayflower                          |   | Purslane  | and many more broadleaf weeds   |
| Deadnettle                         |   | Ragweed   |   |

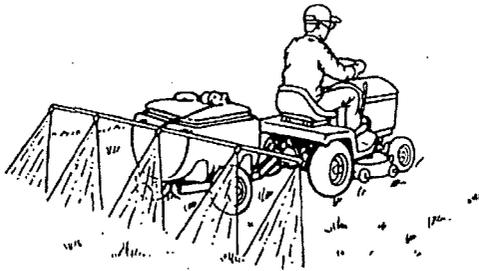
\* Synonyms  
 \*\* Use the spot treatment application method for improved performance when controlling or suppressing these weeds. May require more than one application for complete control.

### 6.1 Broadcast Application Rates

The broadcast application rate for Cool-Season Turfgrass (Kentucky bluegrass, annual bluegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of these species) is 1.2 to 1.5 fl.oz. per 1000 sq.ft. Do not apply to bentgrass or newly seeded grass. See Table 8 for typical spray mix rate.

The broadcast application rate for Warm-Season Turfgrass (dormant hybrid Bermudagrass, dormant common Bermudagrass, dormant zoysiagrass and dormant bahiagrass) is 0.75 to 0.83 fl.oz. per 1000 sq.ft. Do not apply to St. Augustine grass (including Floratam) or newly seeded grass. See Table 9 for typical spray mix rate.

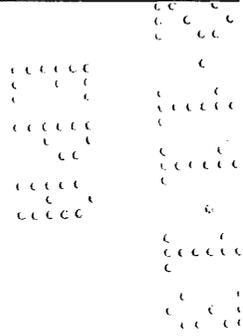
Spray equipment options include tow-behind sprayers with spray boom or spray bar. To calibrate your application equipment contact your sprayer manufacturer or consult your equipment owner's manual for speed and pressure settings required to deliver the spray solution at a target volume of 1 gallon per 1,000 sq.ft. (or 43 gallons per acre).



**Table 8. Broadcast Application Rates to Cool-Season Turfgrass** (Kentucky bluegrass, annual bluegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of these species.)

| Application Rate | Area to Spray and Dilution Rate                            |   |   |                             |
|------------------|--|---|---|-----------------------------|
|                  | Rate per gallon  | Rate per 15 gallons   | Rate per 25 gallons   | Rate per acre               |
|                  | Coverage area per gallon of mixed solution is 1,000 sq.ft. | Coverage area per 15 gallons of mixed solution is 15,000 sq.ft. | Coverage area per 25 gallons of mixed solution is 25,000 sq.ft. | 1 acre = 43,560 sq.ft.      |
| <b>Low Rate</b>  | 1.2 fl.oz. per gal of water                                | 18.0 fl.oz. per 15 gal of water                                 | 30.0 fl.oz. per 25 gal of water                                 | 3.25 pt per 43 gal of water |
| <b>High Rate</b> | 1.5 fl.oz. per gal of water                                | 22.5 fl.oz. per 15 gal of water                                 | 37.5 fl.oz. per 25 gal of water                                 | 4.00 pt per 43 gal of water |

Sprayer must be calibrated to apply 1 gallon of spray solution per 1,000 sq.ft. (or 43 gallons of spray solution per acre). Contact your sprayer manufacturer or consult your equipment owner's manual for speed and pressure settings required to deliver target spray volume.



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**Table 9. Broadcast Application Rates to Warm-Season Turfgrass** (Dormant Hybrid Bermudagrass, dormant common Bermudagrass, dormant zoysiagrass and dormant bahiagrass. Do not apply this product to St. Augustine grass (including Floratam) bentgrass or newly seeded grass.)

| Application Rate | Area to Spray and Dilution Rate                            |   |   |                             |
|------------------|--|---|---|-----------------------------|
|                  | Rate per gallon  | Rate per 15 gallons   | Rate per 25 gallons   | Rate per acre               |
|                  | Coverage area per gallon of mixed solution is 1,000 sq.ft. | Coverage area per 15 gallons of mixed solution is 15,000 sq.ft. | Coverage area per 25 gallons of mixed solution is 25,000 sq.ft. | 1 acre = 43,560 sq.ft.      |
| Low Rate         | 0.75 fl.oz. per gal of water                               | 11.25 fl.oz. per 15 gal of water                                | 18.75 fl.oz. per 25 gal of water                                | 2.00 pt per 43 gal of water |
| High Rate        | 0.83 fl.oz. per gal of water                               | 12.45 fl.oz. per 15 gal of water                                | 20.75 fl.oz. per 25 gal of water                                | 2.25 pt per 43 gal of water |

Sprayer must be calibrated to apply 1 gallon of spray solution per 1,000 sq.ft. (or 43 gallons of spray solution per acre). Contact your sprayer manufacturer or consult your equipment owner's manual for speed and pressure settings required to deliver target spray volume.

**Dormant turf:** This product may be applied to fully dormant Bermudagrass, fully dormant Zoysia and fully dormant bahiagrass.

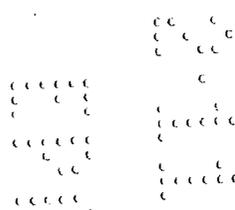
**Do not apply** this product to warm-season turfgrass during spring green-up or in the fall during the transition period between active growth and dormancy.

### 6.2 Spot Treatment Rates

The spot treatment application rate for Cool-Season Turfgrass (Kentucky bluegrass, annual bluegrass, perennial ryegrass, tall fescue, red or fine leaf fescues and mixtures of these species) is 1.5 fl.oz. per gallon of water per 1000 sq.ft. Do not apply to bentgrass or newly seeded grass.

The spot treatment application rate for Warm-Season Turfgrass (dormant hybrid Bermudagrass, dormant common Bermudagrass, dormant zoysiagrass and dormant bahiagrass) is 0.75 to 0.83 fl.oz. per gallon of water per 1000 sq.ft. Do not apply to St. Augustine grass (including Floratam) or newly seeded grass.

Spray until leaves are thoroughly wet but not dripping. Adjust sprayer nozzle to a coarse spray (low pressure, big droplet). Spray equipment options include tank sprayers, pump-up sprayers, hand pump sprayers, back pack sprayers, and spot sprayers. Do not make spot treatments with hose-end sprayers.



### 6.3 Maximum Application Rates

- **Lawns, Yard and Residential Turfgrass:** Do not apply more than 4 pints of product per acre [1.5 fl.oz. of product per 1000 sq.ft.] per application [1.0 lb 2,4-D acid equivalent, 0.25 lb triclopyr acid equivalent and 0.10 lb dicamba acid equivalent per acre per application]. The maximum number of broadcast applications per year is two per year. The maximum seasonal rate is 8 pints of product per acre [or 3.0 fl.oz. of product per 1000 sq.ft.] per season [2.0 lb 2,4-D acid equivalent, 0.50 lb triclopyr acid equivalent and 0.20 lb dicamba acid equivalent per acre per year].

## 7. Spray Drift Management

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of ground application can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

### Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

### Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

### Equipment

All ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates. Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the crop canopy.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

**PESTICIDE STORAGE:** Store in original container in a locked storage area inaccessible to children or pets. Keep from freezing.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**[For Plastic Containers – Nonrefillable with capacities equal to or less than 5 gallons:]**

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

[OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**[For Plastic Containers – Nonrefillable with capacities greater than 5 gallons:]**

**CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse [or pressure rinse] container (or equivalent) promptly after emptying. Then offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

[OR

[Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.]

**LIMITED WARRANTY AND DISCLAIMER**

FOR USE ONLY AS DIRECTED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. If these terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full. The terms of this LIMITED WARRANTY STATEMENT cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere.

# APPENDIX

## 1. Statements which may appear on different label components depending on packaging configuration.

- See next panel for additional Precautionary Statements and First Aid
- Net Contents: \_\_\_\_\_
- EPA Est. No. \_\_\_\_\_
- [Note to reviewer: This statement may be placed on containers to comply with California Prop 65: Attention: This product contains a chemical known to the state of California to cause cancer.]

## 2. Advertising claims that may be presented on container labeling, advertisements, brochures, and other marketing/sales promotional materials:

- [Controls], [kills] [brush] [brushy weeds] [weeds] [thistles] [including] [poison ivy], [and] [poison oak], [may include any species listed on label]
- [Controls], [kills] [weeds] [and] [brush]
- Makes up to xx gallons [of spray solution]
- 1 [pint], [quart], [gallon], [container] makes up to XX gallons [of spray solution]
- 1 [pint], [quart], [gallon], [container] covers [up to] XX [sq ft] [acres] [of pasture] [of turf]
- Mixes with water
- May be used in pastures grown for hay.
- [Effective] pasture herbicide [for tough] [weeds] [and] [brush] [control].
- [Controls], [kills], [thistles], [wild roses], [buckbrush] [and more weeds listed on label]! [may include any species listed on label]
- [Controls], [kills] [thistles], and [wild roses], [and many other] [broadleaf weeds] [and] [brush] [listed on label] in [pastures] [lawns]. [may include any species listed on label]
- [Controls] [kills] weeds including [Canada thistle], [musk thistle], and [leafy spurge]. [may include any species listed on label]
- [Controls] [kills] [weeds] [and] [brush] with [spines] [and] [thorns]
- [Controls] [kills] weeds and brush
- [Controls] [kills] weeds [and] [or] [brush] to optimize grazing [area]
- Designed for use with [ATV sprayers] [and] [or] [tow-behind sprayers] [and] [or] [tank sprayers] [and] [or] [pump-up sprayers] [and] [or] [sprayers]
- Can be used with [Brand X] [ATV sprayers] [and] [or] [tow-behind sprayers] sprayer
- Labeled for use on [pastures] [and] [lawns] [and] [brush]
- Triple action formula
- Treats [select] northern and [select] southern grasses.
- Kills the root.
- [Kills] [controls] XX+ [weeds] [and] [brush].
- Starts working [quickly] overnight
- Works overnight for visible results
- A broadleaf weed and brush killer
- [Broadleaf weed] [and] [brush] control.
- For [post emergent] [effective] control of [unwanted] [broadleaf] [weeds] [and] [brush]
- [Controls] [kills] weeds and brush [in] [pastures] [fencerows] [CRP land] [non-crop areas] [on] [farmsteads]
- Rain-Proof in less than XX hours.
- No Surfactant Required
- [Fenceline] [fencerow] cleanup
- [Controls] [kills] [woody] [brush] [and] [weeds]
- A Brush and Broadleaf Herbicide for Non-cropland and Turf
- Works on actively growing woody plants & weeds
- [Tool] for cleaning up trees or shrubby brush
- Contains [three] [3] active ingredients

